

PRESIDENT'S DAUGHTER SHOWS GREAT PLUCK.

While riding with President Roosevelt, her father, Miss Alice Roosevelt had a narrow escape in Washington the other day. The horse were trotting along Seventeenth street toward the boundary, when, upon reaching Rhode Island avenue, a lumbering herd came upon them, frightening Miss Roosevelt's horse so that it swerved suddenly.

The President was riding slightly in advance, and was interfered with by the vehicle and prevented from going



MISS ALICE ROOSEVELT. (The President's eldest daughter.)

to his daughter's assistance. In the meanwhile the intrepid horsewoman had gotten her steed under control.

President Roosevelt turned so quickly that the horse seemed to stand immovable, the rider sitting erect, like a sentinel on guard. An orderly in uniform was half a square behind.

President Roosevelt has purchased the original drawing of Bernard Partridge's recent London Punch cartoon, representing the President as a Rough Rider. A reproduction of the famous picture is shown on this page.

THROWING THE BOOMERANG.

Flight of the Australian Weapon Analyzed by a Scientist.

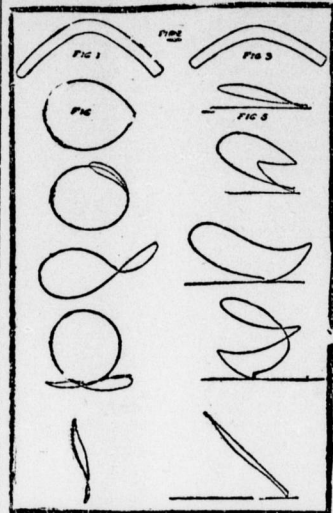
The wonderful flights of the boomerang, described by travelers, are seldom seen to-day, and, though there are many natives of Australia who can make a boomerang go to a distance of 250 feet before it returns to them, there seems to be only one trustworthy account of a much more sensational throw. According to this account a boomerang described five circles in the air, traveled to a distance of about 270 feet from the thrower and rose to a height of 135 feet.

There are two principal types of this weapon, as described by a recent experimenter. The first, shown in figure No. 1, is bent almost to a right angle, and has the cross section shown in No. 2. The cross section diminishes slightly toward the ends, and the arms are twisted from the plane, like the sails of a windmill, being rotated in the direction of a righthanded screw.

A boomerang of the second type is shown in figure No. 3. It has a cross section similar to that of a boomerang of the first type. Its arms, however, are twisted in the opposite direction, and thus involve a lefthanded rotation. On both types one side is more rounded than the other.

A boomerang of the first type is held with the more rounded side to the left, and the concave edge forward, and is thrown in a horizontal direction. As much rotation as possible is given to it, but instead of remaining parallel to its original direction, "the plane of rotation has an angular velocity, first about the direction of trans-

lation, and second about a line in its plane perpendicular to this. The effect of the latter is that the path curls to the left, while owing to the



former the plane of rotation inclines over to the right, i. e., rotates in the direction of the hands of a clock facing the thrower."

After it has described nearly a complete circle the boomerang goes more slowly, and finally falls near the feet of the thrower. In figures Nos. 4 and 5 its flight is illustrated by means of projections on a horizontal and on a vertical plane. Until the velocity becomes small the up hill path is nearly straight, but the moment that point has been reached the weapon starts to return along a track close to that of the ascent.

If the thrower wishes the weapon to describe a second circle in front of him, he must cast it from him with much greater force, so that after one circle has been described it may still have sufficient velocity to make a second one. Moreover, after the weapon has described the first circle and while it is over the thrower's head the axis of rotation must point in an upward direction in front of him, for if it points behind him the subsequent path will be behind his back, and a figure of eight will become possible.

If a path with a second loop in front of the thrower is desired, a boomerang with much twist and well rounded should be chosen, and the thrower's body, while throwing it, should lean over to the left.—Chicago Record-Herald.

British War Office.

This picture illustrates the famous British war office in London, which has been the European centre of interest in the great South African trouble.



Here are received all the official telegrams from the front and here are posted the bulletins which the authorities see fit to publish. Ever since the war began the street before the grim old building has been crowded with anxious relatives of the fighting men, eager for news of husband, brother, sweetheart or father, and many have been the distressing scenes the war officials have been compelled to witness.

The average duration of marriages in England is twenty-eight years, in Russia, with thirty years, is the only country to beat her. In France and Germany twenty-six years is the average duration.

A TIMBER-FLUME IN BRITISH COLUMBIA.



The flumes, which are used to float logs and hewn timber from the mountain tops to the sawmills, are fed by the mountain torrents, and are in some cases between three and four miles long. The lumber men, after their week's work in camp, save a tedious journey by constructing a rough wooden skiff and using the waterway, traveling at times at the rate of a mile a minute. A gaff is used as a brake.—London Illustrated News.

Great and New National Industry.

Millions of Acres For Macaroni Wheat

THE United States Department of Agriculture has just announced one of the most valuable discoveries of recent years. It is the introduction of the drought resisting macaroni wheat, imported from the Volga region of East Russia. This wheat is adapted to semi-arid districts and can be profitably grown in the great plain regions of the United States far beyond the 100th meridian.

Already astounding results have been obtained by the Government. In South Dakota, where the crop has just been harvested from one locality,

business enterprise may be brought into existence, for the reason that the macaroni wheat from Southern Europe is succeeding so well in the great plains as to warrant the establishment of macaroni manufacturing. About 15,000,000 pounds of foreign macaroni is imported into this country each year, solely because being made from true macaroni wheat it is considered to be of better quality than our domestic macaroni, which is made almost entirely from bread wheat. All the costs of the imported product can now be saved to this country if the farmers and millers will furnish our factories with the right kind of material, and the factories are anxious to have the same.

The area of wheat in the United States in 1899 was over 44,000,000 acres. At the lowest estimate, therefore, if the average yield of wheat is increased only one bushel per acre we will have an increase of 44,000,000 bushels, worth at the former price for



Territory in which macaroni wheat will succeed best, and without irrigation as long as the summer rainfall is at least 10 inches. Territory in which macaroni wheat may be grown, but the quality of the grain will not be so good.

it is reported that the yield of macaroni wheat will be from thirty-five to forty bushels per acre, which is one-third more per acre than the average yield of the regular wheat from this section.

The establishment of this new wheat industry will be of incalculable benefit to agriculture in the semi-arid plains. A million or more of acres can thus be given to profitable wheat raising, which, on account of drought, have heretofore been entirely idle.

Macaroni wheats differ radically from the ordinary bread wheats. The grain is much harder, and in the best varieties contains an unusual amount of nitrogen and a correspondingly small amount of starch. The quantity and quality of the gluten make it exceedingly valuable for making macaroni.

The area outlined by the Department of Agriculture where macaroni wheat will succeed best is a long belt extending northward and southward through the great plain from North Dakota to the Texas coast. In width it embraces nearly the whole of the two Dakotas, Nebraska, the greater part of Kansas, Oklahoma and the eastern sections of Colorado, New Mexico and of Central Texas.

The most remarkable thing regarding macaroni wheat is this: It is not only true that it can be grown in dry districts, but it must be grown there in order to produce the best quality of grain, and up to a minimum of about ten inches of an annual rainfall the drier the better.

Probably the most important announcement from a commercial standpoint as a result of the new wheat industry is the fact of immediate market for these wheats. The entire present crop of this year, which will be about 100,000 bushels, was contracted for even before harvested at a good average price. Another important

1900—nearly sixty cents per bushel—about \$26,000,000. These figures will give at least an idea of the possibilities for the new macaroni wheat industry.—New York Herald.

NECK AND NECK.

A Queer Sport That Finds Favor in the Bavarian Alps.

One of the queerest sports is that known as "Streck Katzenzichen" (a word which absolutely defies translation)—which is practiced by the sturdy sons of the Bavarian Alps.

It is a trial of neck strength. Two men, says a writer in the New York



A NECK-AND-NECK TUG-OF-WAR.

Herald, lie down facing each other. Then a rope is passed over their heads, as shown in the illustration. Two chalk lines are drawn between the contestants. The object is to draw the opponent so far that his finger tips shall be beyond the second line. This rough pastime means sore necks and bleeding ears, but it is greatly enjoyed by all beholders. The winner usually receives a cash prize, and the contest is invariably followed by dancing on "the arena where the bloody conflict was pulled," as the local prints describe it.

Eggs and mulberry trees were sent out to Georgia by the British government shortly after the settlement of the colony.

AGRICULTURAL HINTS

Marks of a Good Milker.

There may be certain marks which indicate a good milker, but there is no sure guide except to weigh the milk and the food. The farmer will then know exactly one kind of cow he has and how much her milk costs.

White Clover is Hardy.

White clover is a hardy plant, and if seeded on bare places in the pasture or wherever there is a vacancy it will soon germinate and secure a hold. It may be seeded late and will make considerable growth if winter does not appear too soon. White clover is one of the best for sheep, and it is subject to fewer insect attacks than red clover.

Value of Wood Ashes.

A great difficulty in the purchasing of wood ashes is the fact that ashes absorb moisture, even the apparently dry ashes containing from 10 to 20 percent of moisture while the proportion of moisture varies according to the humidity of the atmosphere. No correct estimate can be made of the value of ashes, but 100 pounds will contain about 40 pounds of lime, five pounds of potash, two pounds of phosphoric acid and also proportions of magnesia and other mineral substances. It is seldom that ashes contain sufficient plant foods to reach the value of \$10 per ton.

Values of Clover and Timothy.

It is said that timothy of good quality contains a little more than a half pound, or fourteen-twentieths of a pound of nitrogenous matter in 25 pounds. Good clover hay has two pounds in 20, or two and a half in 25, and lucerne has two and one-fifth in 20 pounds. This explains why clover is so much better for milk production, or for fattening stock than timothy hay. Mr. J. S. Woodward claims that barley straw is better than timothy for feeding to sheep, but he probably means barley cut, as all grains should be while yet in the "dough," or soft enough to be crushed up between the thumb and finger. We do not put a very high value on straw, corn stover or hay of any kind that has been allowed to stand until the seed is fully ripe before it is cut. Chemists may tell us that only the water has dried out of it, but the material juice of a plant is not the same thing as the water from the well or brook. We never saw a chemist who could make a slice of good apple or peach by adding water to the evaporated fruit, although we own that the fruit dried quickly in the evaporator does not undergo the same change as it used to under the old process of drying in the sun. And dried beef will not make a good beefsteak by soaking it in water.

Milking Period of Cows.

We have not hesitated for many years to express our opinion that a good cow of a milking type (and that may be Jersey as well as an Ayrshire or Holstein, for the type shows the tendency to produce milk at all times, and even under unfavorable conditions, more surely than it indicates the largest quantity she can be made to produce), can be milked continuously for years, from one calf to another, if she is properly cared for, although as the milk is not good for family use or butter making, the last month before she freshens, and sometimes for a longer time, we think it would be better that she go dry for that time, if she can be induced to do so by a gradual reducing of the food given her, but never by ceasing to milk her or to take all the milk when she is yielding three or four quarts a day. It is better to take such milk and give it to the pigs than to leave it in her udder, but do not give it to sows that will farrow soon, or that have sucking pigs. Like the colostrum or milk given directly after the calf is born it may be too physical, and perhaps too heating for the sow. But the Farm and Home of London, England, raises a new question that is in a way connected with this. How soon should the cow be served again after her calf is dropped to produce best results in milk production? They say that the first time in heat might do for strong, robust cows, particularly those that have had several calves, while heifers, thin cows, and such as have not thrived since calving should be kept one or two months longer. We have no records in our experience to give us any very decided opinion, but our preference would be that the cow should not drop a calf any oftener than once a year, and if we desired to change the time she came fresh we would prefer to have her time extended instead of lessened.

Keep the Hogs Thriving.

I came to the conclusion several years ago, writes John McMullen of Vermont, that hemlock boards were cheaper than corn, so built a hog house 24x30 feet, with 12 feet posts, and a ventilator through the roof. I double-boarded with matched boards, putting heavy paper between the boards. I put three windows in the east side and two in the south side. These admit plenty of sunshine, which I think is very essential to the comfort and health of the hogs.

I divided it into eight pens, 10 feet deep, with an alley four feet wide in the centre, which makes it very handy about feeding. A door opens from each pen into the alley, which makes it very convenient about removing

the hogs. There is also a door between each pen, so that four pens can be turned into one if necessary, which I do when not in use for breeding sows. The upper part of the building I made into a henhouse, with a glass front facing the south and an outside entrance to keep it separate from the hog room. The entire building cost \$250.

I keep about six breeding sows of no particular breed. They are fed on whey except when sucking pigs and for two weeks previous to farrowing. Then I mix in wheat middlings or barley meal, the latter preferred. I have the sows farrow in March and August.

After weaning I feed the pigs skim-milk and barley meal or middlings, till they are two months old, giving them all they will eat. At the end of that time substitute whey for the milk, but continue the meal with the addition of a few ears of corn. The object is to keep them growing and fat enough to kill at any time. I market them in May and October, my experience being that pork brings the best price in these two months. I let them run in a large yard in the summer and have never had any trouble with lame pigs. I usually keep about 20; 10 in summer and the same in winter.

I keep a summer and a winter dairy, so that I have whey the year round. I sell my skim-milk at the separator for 10 cents per 100 pounds and get the whey back, which I think is the most profitable way.

There are four things necessary for the profitable keeping of pigs, viz. cleanliness, a warm place, good dry straw and plenty of it for a bed, and all they will eat from the time they are dropped till the day of killing. I feed my hogs regularly three times a day, and never have squealing hogs.

My neighbors sometimes remark, "How do you make money on hogs?" It costs me \$2 to make pork for every \$1 I get back." But when I inquire their way of caring for their hogs it is no mystery to me. You can throw a cat through the cracks in their pens. They feed only when they happen to hear the pigs squeal, and wait until husking corn in the fall to fatten them. They dump in enough green corn in the morning to last all day, of which one-third is wasted. I would rather have two bushels old corn than three bushels new for fattening purposes.—New England Homestead.

Notes from Many Sources.

Separate the young roosters from the hens.

You cannot keep the poultry quarters too clean.

If possible, feed pigs of different ages separately.

It's a difficult matter to feed too much succulent food to stock.

When fowls are deprived of green food the yolks of their eggs are a very pale yellow.

Now is the time to carefully watch and tend the poultry intended for the Thanksgiving market.

You can never have a good dairy herd unless you have an occasional weeding out of the poorer cows.

If there was more attention paid to the swill barrel there would be less attention paid to doctoring hogs.

See that wormy fruits are picked up and destroyed. Sheep and pigs will tend to this work and do it very cheaply.

Any farmer who persists in producing anything that is not up to the standard must expect to see hard times.

Give the hogs only the amount of food that they can eat up clean. Any more than this is sure to be wasted.

When a horse is "off his feed" bran mashes with a little careful nursing will generally bring the animal around.

Don't let the fowls begin to roost on fence tops and in trees. Many cases of roup have their beginning in this way.

Don't let your hunting dogs train in the poultry yard. Hens are afraid of dogs, and a bad scare will do much to stop laying.

The Plymouth Rocks, Wyandottes and Langshans make the best winter layers. Some strains of the Light Brahmas are good also.

Live stock may now be watched and cared for to advantage. Be sure you have all animals in good shape to go through the winter.

See that the roof on poultry house is perfectly tight and the floor is dry. Fowls will not be healthy if compelled to live in damp houses.

If possible, keep all male fowls in a separate yard. They will be less likely to fight and injure themselves, and the whole flock will do better.

First make a few hens pay you a profit, then start the large flock. Many a man has made his hens unprofitable by starting on too large a scale.

Don't let the hens go into winter quarters covered with mites. You will not notice them so much in cold weather, but they hurt the fowls worse.

What is wanted by the mutton consumer is a lean, tender and juicy meat. Sheep raisers should breed and feed so as to furnish meat of this character.

One part of corn meal ground as finely as possible, one part of bran ground with the corn, and one part of cottonseed meal makes an excellent mixture for lambs.

Treat fowls kindly, and teach them to regard you as their friend. If any are to be caught, don't chase them, but go to the house at night and lift them gently from the roost.

PRESIDENT BUYS DRAWING OF THE PUNCH CARTOON.



PARTRIDGE'S CARTOON IN PUNCH.